CERTINEXT · TELECOMMUNICATIONS · INDIA

A Regional Telecom Operator in India Reduces Certificate-Related Network Incidents and Automates Renewal Across Its Infrastructure with eMudhra CertiNext

SECTOR	REGION	SOLUTION
Telecommunications	India	CertiNext

CLIENT OVERVIEW

The organisation is a regional telecom operator in India providing mobile, broadband, and enterprise connectivity services across two southern states. With a subscriber base of around 4 million and a network infrastructure spanning cell towers, data centres, and enterprise customer sites, the operator manages a significant volume of SSL/TLS and network authentication certificates across its operational technology and IT environments.

THE CHALLENGE

The operator's network and IT teams managed certificates across billing systems, network management platforms, customer portals, and enterprise VPN endpoints using a combination of vendor notifications and manual tracking maintained by different teams. There was no group-level certificate inventory. Over 18 months, the operator experienced three certificate-related incidents — including one on the customer self-care portal that caused login failures for around 8,000 customers over several hours, resulting in a surge of contact centre calls. A separate expiry on an internal network management system required an emergency maintenance window that affected network visibility for the NOC team during resolution. The IT security team raised certificate management as a risk item, noting that as the operator added more enterprise customer connections, the certificate footprint would only grow.

> *"A certificate expiry that causes thousands of customer login failures in the same week as a network management outage is hard to explain. We knew we had a systemic gap that needed fixing."*
>
> **Head of IT Security**

THE SOLUTION

eMudhra deployed CertiNext across the operator's network infrastructure and IT systems. A discovery scan identified 320 certificates across billing, customer portal, network management, and enterprise VPN infrastructure. Each certificate was classified by operational tier — customer-facing, network-critical, and internal — with different renewal triggers for each category. Customer-facing and network-critical certificates were configured with 90-day renewal workflows and direct escalation to the IT security head if any entered the 30-day window without action. Internal certificates used automated renewal with minimal manual intervention. A private CA was deployed for the enterprise VPN and internal network management certificates, reducing external CA procurement costs for these internal trust use cases. CertiNext's dashboard gave the NOC and IT security teams a shared view of certificate status across the entire estate.

RESULTS

All near-expiry certificates were addressed within the first three weeks. In the 12 months following deployment, the operator recorded zero customer-facing incidents and zero NOC disruptions attributable to certificate expiry. Enterprise VPN certificate costs reduced following migration to the private CA.

METRIC	BEFORE	AFTER
Certificate estate visibility	320 certificates; no group inventory	All 320 governed in CertiNext with tier classification
Customer-facing incidents from cert expiry	1 incident; 8,000 customers affected	Zero in 12 months post-deployment
NOC disruptions from cert expiry	Emergency maintenance window required	Zero NOC disruptions post-deployment
Enterprise VPN cert costs	External CA for all VPN certs	Reduced via private CA for internal trust
IT security risk register	Certificate management as open risk item	Risk item closed post-deployment

About eMudhra. eMudhra is a globally trusted provider of digital trust services, offering eSignatures, PKI, Certificate Lifecycle Management, Multi-Factor Authentication and Identity & Access Management solutions. Licensed by the Controller of Certifying Authorities (CCA), India, eMudhra serves 1,000+ enterprises across 40+ countries, helping organisations build secure, compliant and paperless digital ecosystems.

Customer name withheld for confidentiality.